

Green Outreach Programmes of Barasat Government College

Barasat Government College is located in the heart of Barasat town, district headquarters of North 24 Parganas District. The major environmental issues faced by the residents of the area pertain to issues of pollution, sanitization and spread of vector borne diseases like malaria, dengue etc. Hence most of our outreach programs have been designed to address these topical issues. However, the post graduate Botany department of the college have taken some unique initiatives in spreading agricultural knowhow among farmers of the locality and students to booster self employment schemes and increase agricultural yields.

Outreach Programmes Performed During Academic Session 2018-2019

Date of event	Event	Nature of event	Category of Events
Seven Days (24.04.2019 - 30.04.2019) Special Camping Programme. On 25.04.19	Leaflets were distributed in nearby areas by NSS volunteers.	To spread awareness about vector-borne diseases among the public.	Awareness programme

Representative pictures of the event



Outreach Programmes Performed During Academic Session 2019-2020

Sl.no.	Date of events	Events	Nature of event	Category of Events
1.	26.07.2019	Rally against Dengue and Chikungunya by NSS volunteers	To spread awareness in the surrounding area campus	Awareness programme
2.	27.07.2019	Leaflet distribution and public interaction in nearby areas by NSS volunteers.	To spread awareness about vector-borne diseases among the public.	Awareness programme

Representative pictures of the events



Leaflet distribution by NSS volunteers



Rally against Dengue and Chikungunya by NSS

Outreach Programmes performed during Academic Session 2020-21

Due to Covid outbreak outreach programmes performed were very few in number, considering the need of hour several webinar and awareness programmes were performed

Date	Event	Location of event	Nature of the event
28.01.2021	Volunteers of NSS Unit, Barasat Government College had participated in Vivek Samhati Utsav, 2021 held under auspices Govt. of West Bengal and organized by and held at University of Kalyani on 28.01.2021.	Vivek Samhati Utsav, 2021 held under auspices Govt. of West Bengal and was organized by and held at University of Kalyani Campus.	Outreach Programme generating awareness against Covid-19 During Covid period

Representative pictures of the event



Awareness Programme through performing at Vivek Samhati Utsav organized by Kalyani University

Outreach Programmes performed during Academic Session 2021-22

Sl. No.	Date	Event	Location of event	Nature of the event
1.	22.05.2022	International Biological Diversity Day was celebrated beyond campus through documentation and study of Plant Species	Darjeeling and adjoining area	Community outreach activity
2.	03.06.2022	Observed World Bicycle Day through organization of a rally to encourage utilization of carbon neutral vehicle for commuting	Surrounding areas of Barasat Govt. College	Community awareness programme on environmental pollution and outreach programme
3.	21.06.2022	Survey at Saradapally (adopted slum) to identify and understand the problems of this slum	Saradapally (adopted slum area)	Community outreach activity To identify the problems at slum area
4.	22.06.2022	Awareness Programme on water-borne and vector-borne diseases and garbage disposal at Saradapally (adopted slum) Dr Jayati Basu, Associate Professor of Zoology, BGC interacted with slum dwellers	Saradapally (adopted slum area)	Community outreach activity (outside of campus)
5.	22.06.2022	Conducted sanitization programme	Saradapally (adopted slum)	Community outreach activity (outside of campus)
6.	23.06.2022	Awareness Programme on Prevention of Plastic Pollution was organized by the NSS Unit, in collaboration with Barasat Municipality. In this Programme, Sri Prasanta Debnath, Department of Conservancy and Public Health, Barasat Municipality was the resource person.	Saradapally (adopted slum area)	Community outreach programme against plastic pollution
7.	04.03.2022	An agricultural field had been selected to visit for three consecutive academic years by students for continuous study and identification of plant diseases. Interactive sessions with farmers helped to enrich the stakeholders about the field disease and possible solutions were also offered to them. M.Sc. SEM-II and SEM-IV	Madhabpur, Nilganj Santoshpur adjoining area, Amdanga, North 24 Parganas	Farmer's field visit to learn about 1. Different diseases in agricultural crops 2. To identify causes of outbreak of diseases in agricultural Field. 3. To suggest a solution through interactive session

		students visited during academic session 2021-22, (26 students)		
8.	Faculty member associated with nonremunerative consultancy services	Farmers are being trained in utilizing biofertilizers under the guidance of Faculty member Dr. Anuradha Bandopadhyay. She has been associated with Sudharma Krishi consultancy P(Ltd), an organization that operates on ICAR (Indian Council of agricultural research) mechanism to offer benefit to the farmers through researches on Agricultural technologies.	Madhabpur and adjoining areas	To train the farmers in the field of organic farming through application of Biofertilizers and Biopesticides

Representative pictures of the events

1. International Biological Day Observation through Study of plants during the field visit at Darjeeling and adjoining area on 22.05.2022



2. Observation of World Bicycle Day on 03.06. 2022 through a rally to outreach local people to make them aware about using carbon free vehicle



3. Survey to identify problems at Saradapally (Adopted slum area)



4. Awareness programme under the guidance of Dr. Jayati Ghosh, Associate Professor of Zoology, BGC, against Vector Borne Diseases at the Saradapally slum area on 22.06.2022 with NSS volunteers



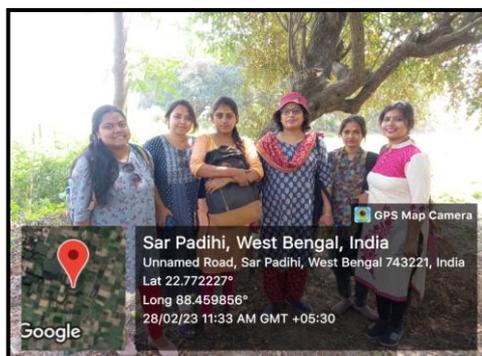
5. Conduction of Sanitization programme at the adopted slum Saradapally on 22.06.2022 with NSS volunteers



6. Campaign against plastic pollution at Saradapally, in collaboration with Barasat Municipality



7. Agricultural field visit for plant disease identification and farmers' interactions by M.Sc. Sem2 and Sem4 students, P.G. Department of Botany, BGC, at Sarpadihi, AmdangaSubdivision, North 24 Parganas., on 15.03.2024 for consecutive two academic sessions (2021-22, 2022-23)



Outreach Programmes performed during Academic Session 2022-23

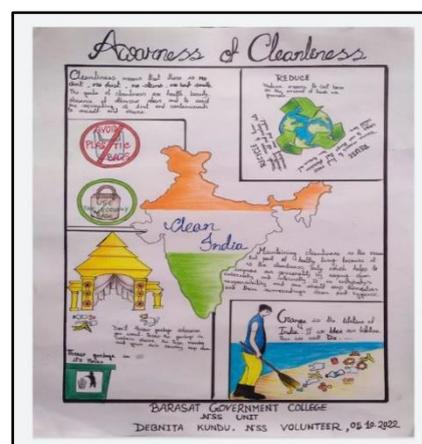
Sl. No.	Date	Event	Location of event	Nature of the event
1.	5.10.2022	1. Azadi ka Amrit Mohotsav, CLEAN INDIA 2.0, 2022, Swachh Kaal: Amrit Kaal during auspicious occasion of Durga Puja Festival Observation of SwachhKaal : Amrit Kaal 2. Prepared drawing on Awareness on cleanliness	Durga puja pandal at nearby locality	Outreach programme to spread awareness about cleanliness by cleaning the festivity refuse.

		Participants 1. Narayan Biswas, NSS Volunteer, BGC 2. Debnita Kundu, NSS Volunteer, BGC		
2.	20.10.2022	NSS Volunteers of Barasat Government College had participated in "Lifestyle for the Environment Pledge" and they received the certificates on it from Ministry of Environment Forest and Climate Change, Govt. of India on 20.10.2022	Online pledge taken to protect environment	Students took pledge to keep environment green and clean
3.	02.12.2022	Students participated in National Conference on Clean Environment & Sustainability Swachh Bharat Mission Campaign , organized by NSS Cell, WBSU Among four students Puja Biswas received a prize by the NSS Cell of the University for her poster entitled " Stop Use Plastic ".	NSS Cell, West Bengal state University	Outreach programme and spreading awareness against plastic use
4.	17.12.2022	Awareness Rally on Dengue from Barasat Government College to Barasat Municipality was arranged. Local people have been made aware about dengue and its prevention.	Barasat Govt. College Locality and surroundings upto Municipality	Outreach programme and spreading awareness against vector borne disease
5.	21.12.2022	Sanitization Programme was carried out by NSS volunteers	Saradapally (Adopted slum)	Outreach programme for cleaning activity beyond campus
6.	04.03.2022 (2021-22) 28.02.2023 (2022-23) 15.03.2024 (2023-24)	An agricultural field had been selected to visit for three consecutive academic years by students for continuous study and identification of plant diseases. Interactive sessions with farmers helped to enrich the stakeholders about the field disease and possible solutions were also offered to them. M.Sc. SEM-II and SEM-IV students visited during	Madhabpur, Nilganj Santoshpur adjoining area, Amdanga, North 24 Parganas	Farmer's field visit to learn about 1. Different diseases in agricultural crops 2. To identify causes of outbreak of diseases in agricultural Field. 3. To suggest a solution through interactive session

		academic session 2021-22, (26 students),2022-23 (24 students),23-24(20 students)		
7.	22.06.2023 to 27.06.2023 BGCBOTVA C001/2023	Students were trained from Value Added Courses entitled: Biodiversity Conservation and Plant Resource Utilization, Course Code: BGCBOTVAC001/22-23, offered by the Department of Botany.	Trained students implemented knowledge and cultivated mushroom at their residences.	To Outreach the social sector through training student community and disseminate such green practices to develop community awareness .
8.	Faculty member associated with nonremunerative consultancy services	Farmers are being trained in utilizing biofertilizers under the guidance of Faculty member Dr. Anuradaha Bandopadhyay. She has been associated with Sudharma Krishi consultancy P(Ltd), an organization that operates on ICAR (Indian Council of agricultural research) mechanism to offer benefit to the farmers through researches on Agricultural technologies.	Madhabpur and adjoining areas	To train the farmers in the field of organic farming through application of Biofertilizers and Biopesticides

Representative pictures of the events

1. Azadi ka Amrit Mohotsav, CLEAN INDIA 2.0, 2022, on 5.10.2022 ,Swachh Kaal: Amrit Kaal during auspicious occasion of Durga Puja Festival, **Observation of Swachh Kaal : Amrit Kaal**



2. Title: 'Lifestyle for the Environment Pledge'



3. Title: Clean Environment & Sustainability Swachh Bharat Mission Campaign, on 2.12.2022



4. Awareness Rally on Dengue from Barasat Government College to Barasat Municipality. Local people have been made aware about dengue and its prevention. On 17.12.2022-



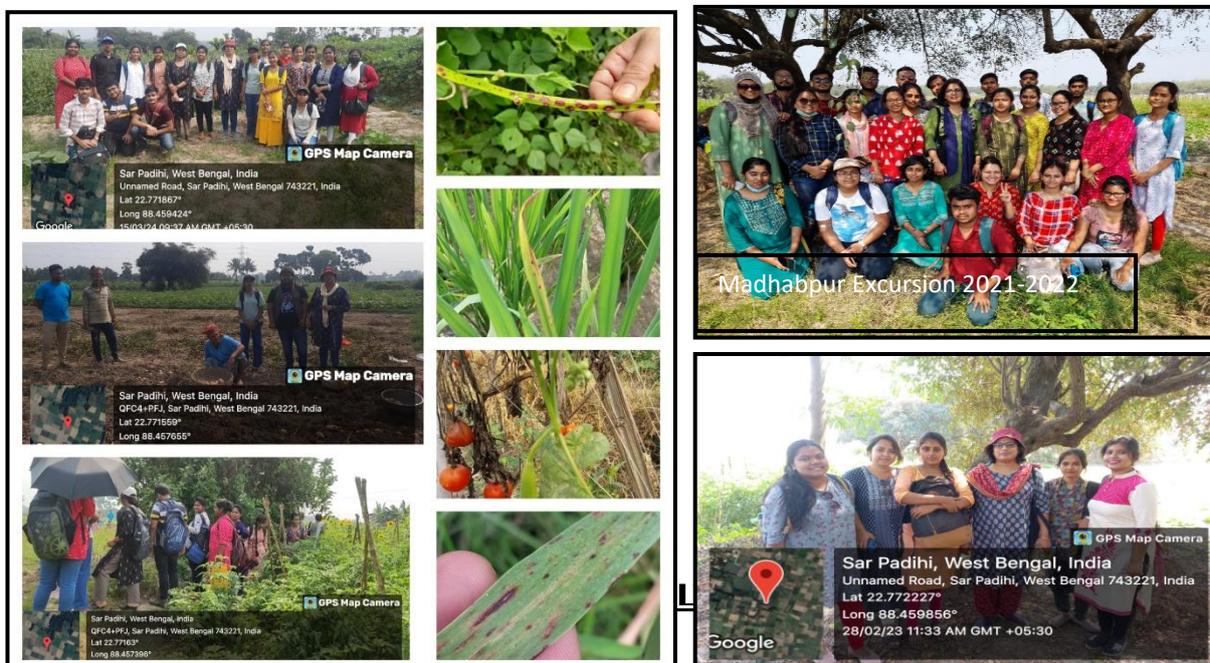
5. 20.12.2022, Smt. Pratyasha Agrawal, Consultant Nutritionist, Department of Clinical Nutrition & Dietetics, made the residents of Saradapally aware of cleanliness in normal life under 'Nutrition Programme', Academic session 2022-23



6. Sanitization programme at Saradapally (Adopted Slum) on 21.12.2022 Academic session: 2022-23



7. Agricultural field visit for plant disease identification and farmers' interactions by M.Sc. Sem2 and Sem4 students, P.G. Department of Botany, BGC, at Sarpadihi, AmdangaSubdivision, North 24 Parganas., on 15.03.2024 for consecutive three academic sessions (2021-22, 2022-23 and 2023-24



Introduction:

A field visit was conducted for plant pathological study and local farmers' interaction. The objective was to assess crop health, study disease patterns and symptoms and promote knowledge exchange with farmers.

Academic session/Dates	Number of student participants	Semester II	Semester IV Special Paper Plant pathology and Virology	Place
2021-22 4.03.2022	26	22	4	Sarpadihi, Nilganj Santoshpur road, Amdanga, North 24 Parganas.
2022-23 28.02.2023	24	19	5	
2023-24 15.04.2024	20	18	2	

1. **Faculty:** Dr. Anuradha Bandopadhyay (SACT), Dept. of Botany, Barasat Government College
2. **Farmers:**
 - Mehenaj Uddin, vegetable grower and seller
 - Fakir, rice and vegetable grower

Activities and Observations

1. Crop Assessment and disease study:

- Different seasonal vegetable crops like tomato, potato, brinjal, cauliflower, chillies, broad beans, bottle gourd, pointed gourd etc. and rice were studied in the field.
- Symptoms like early blight and late blight, powdery and downy mildews, leaf spots and flecks, wilts, rusts, anthracnose, blasts, yellow mosaic virus, leaf curl virus and phytoplasma were found dominating in the field.
- **Rice blast** lesions and brown spot lesions were prevalent in low-lying areas due to excess moisture.
- Tomato plants were highly affected by symptoms of early blight, late blight and *Fusarium* wilt due to untimely intermittent heavy rain in winter.

2. Interactive Sessions:

- Dr. Bandopadhyay explained disease symptoms and management strategies to farmers.
- Farmers shared their experiences and traditional practices.
- Tomato fields were affected most which could not be controlled by traditional application of fungicides like mancozeb.
- Integrated management by organic and chemical pesticides were advised.

Conclusion

Through the field study, students gained knowledge about various disease symptoms of crops, hands on training on disease identification through symptomological and app based study. The field visit also facilitated valuable interactions between students, teacher and farmers. The students got familiar with practical problems of disease incidence on agricultural field crops. It also highlighted the need for tailored solutions, knowledge dissemination, and sustainable practices for farmers.

Students trained from value added course, organized by Department of Botany during 22.06.2023 to 27.06.2023 (BGCBOTVAC001/2023) implemented knowledge and cultivated mushroom at their residences



8. Farmer training in utilization of biofertilizers under the guidance of Faculty member Dr. Anuradha Bandopadhyay, in association with Sudharma Krishi consultancy



TO WHOM IT MAY CONCERN



This is to certify that Dr. Anuradha Bandopadhyay is working with Sudharma Krishi Consultants since 2012 till date. Following her passion to learn new things for gaining experience on different agricultural practices from the senior experts of the company observing their practical works, she joined the company to work voluntarily in the year 2012 against No Payment Basis. Besides learning new things of the vast agricultural sector, she did research works on different projects under her domain. Now she is looking after the said research works as a Head, Project research, voluntarily & no payment basis by the side of her professional work in other institution.

She has gained a good expertise in the field of sustainable agriculture in the meantime through her dedication. She has conducted outreach programs including training to farmers on eco-friendly approaches for managing crop diseases, use of bio-fertilizers and bio-pesticides, eco friendly low cost farming practices through lectures and practical demonstrations in several agricultural programs. Her ability to communicate complex concepts effectively has empowered farmers to adopt sustainable practices. She has a strong track record in different types of back-end research and project formulation. We commend her commitment to advancing environment friendly and cost-effective agricultural practices. We wish her continued success in her endeavours.


S.K. Roy
Executive Officer
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